

101.2 - Low Alloy Steels (chip form)

PLEASE NOTE: The tables are presented to facilitate comparisons among a family of materials to help customers select the best SRM for their needs. For specific values and uncertainties, the certificate is the only official source.

SRM	30f	32e	33e	36b	72g	100b	106b	125b
Description	Cr-V Steel (SAE 6150)	Nickel-Chromium Steel (SAE 3140)	Nickel Steel	Chromium-Molybdenum Steel	Low Alloy Steel (AISI 4130)	Manganese Steel	LA Steel, Cr-Mo-Al (Nitr alloy rG)	LA Steel, High Silicon
Unit Size	(150 g)	(150 g)	(150 g)	(150 g)	(150 g)	(150 g)	(150 g)	(100 g)

Elemental Composition (mass fraction in %)

Al (total)	0.030			(0.041)		1.07	0.329	
Carbon (C)	0.490	0.4086	0.186	0.1143	0.278	0.397	0.326	0.0261
Chromium (Cr)	0.945	0.6775	0.068	2.178	0.905	0.063	1.18	0.0198
Copper (Cu)	0.074	0.1266	0.070	0.1792	0.011	0.064	0.117	0.0707
Manganese (Mn)	0.79	0.7983	0.525	0.4041	0.492	1.89	0.506	0.2751
Molybdenum (Mo)		0.0228	0.224	0.9960	0.170	0.237	0.199	0.0087
Nickel (Ni)	0.070	1.1938	3.36	0.205	0.016	0.030	0.217	0.0375
Niobium (Nb)								

Elemental Composition (mass fraction in %)

Nitrogen (N)	0.010	(0.009)		(0.008)	0.004			
Phosphorus (P)	0.011	0.00888	0.005	0.0074	0.009	0.023	0.008	0.0276
Silicon (Si)	0.283	0.2775	0.262	0.2580	0.223	0.210	0.274	2.889
Sulfur (S)		0.0210						0.0095
Tin (Sn)		(0.011)						0.0034

- Certified values are normal font

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Tungsten (W)

Vanadium (V)

0.00225

0.0043

0.003

0.003

0.003

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SRM	129c	131g	139b	155	163	179	291	293
Description	LA Steel, High Sulfur (SAE 112)	Low Alloy Silicon Steel	Chromium-Nickel-Molybdenum Steel	Chromium-Tungsten Steel	Chromium Steel	LA Steel, High Silicon	Cr-Mo Steel (ASTM A-213)	Cr-Ni-Mo (AISI 8620)
Unit Size	(150 g)	(150 g)	(150 g)	(150 g)	(100 g)	(150 g)	(150 g)	(150 g)

Elemental Composition (mass fraction in %)

Al (total)					0.0028	0.002	0.039	
Carbon (C)	0.125	0.0035	0.403	0.905	0.933	0.027	0.177	0.222
Chromium (Cr)	0.014		0.488	0.485	0.982	0.022	1.33	0.510
Copper (Cu)	0.013		0.097	0.083	0.087	0.056	0.047	0.032
Manganese (Mn)	0.769		0.778	1.24	0.897	0.094	0.550	0.960
Molybdenum (Mo)	0.002		0.182	0.039	0.029	0.014	0.538	0.204
Nickel (Ni)	0.251		0.510	0.100	0.081	0.050	0.065	0.480
Niobium (Nb)								

Elemental Composition (mass fraction in %)

Nitrogen (N)		0.007		0.007			
Phosphorus (P)	0.076	0.013	0.015	0.007	0.006	0.008	0.018
Silicon (Si)	0.020	0.242	0.322	0.488	3.19	0.230	0.300
Sulfur (S)	0.245	0.0004255					

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Tin (Sn)		0.004
Tungsten (W)		0.517
Vanadium (V)	0.012	0.004

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